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MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) COMPLIANCE INSPECTION

SNOHOMISH COUNTY, WASHINGTON

FINAL INSPECTION REPORT

Inspection Dates:
October 23-24, 2012

Report Date:
April 30, 2013

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Section 1.0 Introduction

On October 23-24, 2012, the U.S. Environmental Protection Agency (EPA), Region 10 and an EPA contractor, PG Environmental, LLC (hereinafter, collectively, the EPA Inspection Team) conducted an inspection of the Municipal Separate Storm Sewer System (MS4) Program of Snohomish County, Washington. Discharges from the Snohomish County MS4 are regulated under the *Phase I Municipal Stormwater Permit – National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Discharges from Large and Medium Municipal Separate Storm Sewer Systems* (hereinafter, the Permit; see Appendix A), issued by the State of Washington Department of Ecology (Ecology) and effective September 1, 2012. Snohomish County (hereinafter, the County) maintains coverage under Permittee Coverage No. WAR04-4502. Permit modifications became effective on June 17, 2009 and September 1, 2010. The Permit expired on February 15, 2012, and on August 1, 2012 Ecology reissued the Permit, with limited changes, effective September 1, 2012 through July 31, 2013. The County initially received coverage under NPDES municipal stormwater permits issued by Ecology in 1995.

The Permit authorizes Snohomish County (the Permittee) to discharge stormwater and certain non-stormwater flows to surface waters and to groundwaters of the state from the MS4 owned or operated by the County in the permitted area (defined as areas covered by the Phase I Municipal Stormwater Permit) under the Permit terms and conditions. Section S5.A of the Permit requires the Permittee to implement a Stormwater Management Program (SWMP). The County Environmental Programs Compliance Specialist confirmed that the County is currently operating under the 2012 Stormwater Management Program, dated March 2012 (hereinafter, the County's 2012 SWMP Plan; see Appendix B).

Snohomish is a county on Puget Sound located about 20 miles north of Seattle, Washington. According to County staff, the permitted area encompasses approximately 2,000 square miles. County staff indicated that the majority of the population lies within the western third of the County; the middle and eastern thirds are sparsely populated. County staff also explained that the County's MS4 consists of about 28,000 catch basins which discharge to local waterways including the Stillaguamish and Snohomish River basins; the discharge eventually enters Puget Sound. The County does not have any formal inter-agency agreements with cities or adjoining counties for stormwater collection or conveyance.

With respect to the Permit, the County's NPDES responsibilities are carried out by various County departments and divisions that are responsible for implementing the stormwater program. The County's departments and divisions with roles in the 2012 SWMP Plan include:

- Department of Public Works, Surface Water Management (SWM) Division.
- Department of Public Works, Engineering Services Division.
- Department of Public Works, Road Maintenance Division.

- Department of Public Works, Solid Waste Division.
- Department of Public Works, Fleet Division.
- Department of Planning and Development Services.
- Department of Parks and Recreation.
- Snohomish County Airport.
- Department of Facilities Management.

The purpose of the inspection was to obtain information that will assist EPA in assessing Snohomish County's compliance with the requirements of the Permit, as well as the implementation status of the current MS4 program. The inspection schedule is presented as Appendix C.

The EPA MS4 program compliance inspection evaluated facilities, activities, and projects within the County. The inspection focused on the following three SWMP components described in Section S.5 of the Permit:

- Controlling Runoff From New Development and Redevelopment.
- Source Control Program for Existing Development.
- Operation and Maintenance Program.

The EPA Inspection Team observed deficiencies regarding the County's program for controlling runoff from new development and redevelopment; however due to the organization of the Permit these observations are presented in Section 2.2, Operation and Maintenance Program, of this report. No additional specific discussion of the program for controlling runoff from new development and redevelopment is included in this report.

The EPA Inspection Team obtained information through interviews with representatives from the County's departments and divisions listed above, along with a series of site visits, record reviews, and field verification activities within Snohomish County. The office session was held to obtain information regarding overall program management, program evaluation, and oversight. In addition, the EPA Inspection Team held a closing conference at the Snohomish County offices on October 24, 2012, with representatives from the respective departments attending.

The primary representatives involved in the inspection were the following:

Snohomish County MS4 Program Compliance Inspection: October 23-24, 2012	
Snohomish County – Public Works Department, Surface Water Management Division (SWM)	Bill Leif, Environmental Program Compliance Specialist Karen Kerwin, SWM Manager Debbie Terwilleger, SWM Director Jon Schmidt, Supervisor III
Snohomish County – Public Works, Fleet Division	Roy Scalf, Director Steven Torrence, Supervisor
Snohomish County – Public Works, Road Maintenance Division	James Parker, Asset Maintenance Lead Mel Reitz, Operations Manager Steve Flude, Director Ted Parker, Road Maintenance
Snohomish County – Public Works, Engineering Services Division	Max Phan, Engineering Design Manager Bruce DuVall, Engineering Services Director Lisa Tario, Design Engineer Darrell Ash, Construction Manager Bobann Fogard, Transportation and Environmental Services Director
Snohomish County – Public Works, Solid Waste Division	Dave Schonhard, Operations Manager Deanna Carveth, Project Specialist IV Neil Bresheare, Environmental Monitoring Supervisor Matthew Zybas, Solid Waste Director
Snohomish County – Department of Planning and Development Services (PDS)	Tom Rowe, PDS Permitting Manager Michael Dobesh, Senior Planner Randolph Sleight, Chief Engineering Officer
Snohomish County – Department of Facilities Management	Cindy Hart, Deputy Director
Snohomish County – Department of Parks and Recreation	Sharon Swan, Senior Parks Planner Kristi Kramer, Parks Engineer
Snohomish County Airport	Andrew Rardin, Environmental Manager
Washington State Department of Ecology Representatives	Christina Maginnis, Municipal Stormwater Specialist Rachel McCrea, Municipal Stormwater Specialist

Snohomish County MS4 Program Compliance Inspection: October 23-24, 2012	
EPA Representatives	Julie Congdon, MS4 Inspector and Enforcement Coordinator Dustin Bott, MS4 Inspector
EPA Contractors	Candice Owen, PG Environmental, LLC Kortney Kirkeby, PG Environmental, LLC

Section 2.0 Information Obtained Regarding Compliance with the Permit

Prior to the inspection, the EPA Inspection Team formally requested that the County provide specific documentation for review by the team and have specific documentation available for review at the time of the inspection. The EPA Inspection Team provided Snohomish County with a written list of requested records on September 25, 2012 (hereinafter, EPA Records Request; see Appendix D, Exhibit 1). In response, on October 15, 2012, Snohomish County provided the EPA Inspection Team with an email response including electronic copies of the initial documents requested. In addition, Snohomish County made additional documents available during the inspection and provided documents on a file transfer protocol (FTP) site after the inspection. The complete spreadsheet and associated documents are hereinafter referred to as the Snohomish County Response Inventory, which is presented as Appendix D, Exhibit 2. The EPA Records Request and Snohomish County Response Inventory are referenced, as applicable, throughout this inspection report.

During the inspection, the EPA Inspection Team obtained documentation and other supporting evidence regarding compliance with the Permit and implementation of the County's 2012 SWMP Plan. The presentation of inspection observations in this report does not constitute a formal compliance determination or notice of violation; rather, it identifies potential Permit non-compliance and program deficiencies. Program deficiencies are areas of concern for successful program implementation. All referenced documentation used as supporting evidence is provided in Appendix D, the Exhibit Log; photo documentation is provided in Appendix E, the Photograph Log.

During the inspection, the EPA Inspection Team identified one element of the Snohomish County MS4 program that was noteworthy:

1. The County had provided one-time operation and maintenance assistance to residential owners of permanent stormwater treatment and flow control facilities. County inspectors explained that the decision to perform the one-time service was made by the County Council, and that the County Council might approve the operation and maintenance assistance for another year. Maintenance provided by the County included amending soils, vegetation management, hydroseeding, correcting sedimentation issues, and fixing sinkholes.

Table 1 provides a summary of the EPA Inspection Team's overall inspection observations. Descriptions and details regarding the inspection observations, as well as supporting documentation, are provided in the applicable sections of this MS4 inspection report.

Table 1. Requirements of the Permit (WAR04-4502) and Potential Non-compliance/program Deficiencies Identified by the EPA Inspection Team

Program Elements and Permit Requirements	Potential Non-compliance/ Program Deficiency
Source Control Program Section S5.C.7 of the Permit requires the County's SWMP to include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the County. See Section 2.1 of the inspection report for the specific SWMP and Permit references for each program deficiency or item of potential non-compliance.	1. Snohomish County lacked a process to prioritize followup inspections within the County's GIS database and AMANDA system to ensure that followup is conducted at properties when deficiencies are noted during initial inspections (Section 2.1.1). 2. Snohomish County had not fully developed and implemented a progressive enforcement policy to require source control sites to come into compliance with stormwater requirements within a reasonable time period (Section 2.1.2). See the referenced section of the inspection report for further discussion of these issues.
Operation and Maintenance Program Section S5.C.9.a of the Permit requires the County's SWMP to include a program to conduct and regulate maintenance activities to prevent or reduce stormwater impacts. See Section 2.2 of the inspection report for the specific SWMP and Permit references for each program deficiency or item of potential non-compliance.	1. Concerns pertaining to improper pollution prevention practices and SWPPP implementation were noted during site visits at County facilities (Section 2.2.1). 2. Snohomish County lacked a method or process to facilitate better oversight of the individual County departments and divisions to ensure adequate compliance activities for the operation and maintenance program are performed (Section 2.2.2). 3. Snohomish County lacked coordination mechanisms among departments to eliminate barriers to compliance with the operation and maintenance terms listed in the Permit (Section 2.2.3). 4. Snohomish County had not fully implemented an ongoing training program for employees who have operation and maintenance job functions that could impact stormwater quality (Section 2.2.4). 5. Snohomish County had not fully developed and implemented an enforcement strategy to respond to issues of non-compliance in the maintenance of permanent stormwater treatment and flow control facilities regulated by the County (Section 2.2.5). 6. Observations pertaining to operation and maintenance of permanent stormwater treatment and flow control facilities during site visits at stormwater facilities regulated by the County (Section 2.2.6). See the referenced section of the inspection report for further discussion of these issues.

Section 2.1 Source Control Program for Existing Development

Section S5.C.7.a of the Permit requires the County's SWMP to include a program to reduce pollutants in runoff from areas that discharge to municipal separate storm sewers owned or operated by the County. The program must include application of operational and structural source control best management practices (BMPs) at commercial, industrial, and multifamily properties. Pursuant to the Permit, Pages 20 and 21 of the County's 2012 SWMP Plan outline the focus for the County's source control program in 2012.

On October 23-24, 2012, the EPA Inspection Team conducted site visits at five industrial/commercial properties regulated under the County's source control program. The primary purpose of the visits was to observe Snohomish County's process for conducting source control inspections. The EPA Inspection Team did not observe notable deficiencies at the industrial /commercial properties during the inspection, therefore observations from those site visits are not included in this report.

2.1.1. Snohomish County lacked a process to prioritize followup inspections within the County's GIS database and AMANDA system to ensure that followup is conducted at properties when deficiencies are noted during initial inspections.

Section S5.C.7.iv of the Permit states that if a site has failed to adequately implement required BMPs, the Permittee shall take appropriate followup action(s) which may include phone calls, reminder letters or followup inspections. Page 21 of the 2012 SWMP Plan states:

> For 2012 the focus of the business inspection program will be refined to focus more on business types and locations that were noted as having best management practice (BMP) violations during the initial round of inspections. We will reduce the total number of businesses inspected from 1045 to roughly 700. This reduced number will allow a more focused inspection on businesses that need our assistance and attention.

Pursuant to this requirement, the EPA Inspection Team questioned County inspectors on followup and enforcement for properties that were out of compliance with source control requirements. During the inspection, County staff gave a demonstration of how the County uses its GIS and the AMANDA database for source control. They explained that AMANDA is a central data management system used to generate various forms, letters, and work orders, and that AMANDA is a repository for checklists and operation and maintenance inspection information. The County inspectors explained that each inspection is recorded on a data form. This form is then brought back to the office where the information is hand-entered into the AMANDA database, and the site status and pertinent notes are updated in GIS. The County inspectors explained that AMANDA is used to generate a warning letter for properties that do not comply with source control requirements. The warning letter indicates that the property has 30 days to comply. County inspectors described that their goal for any site found to have compliance issues is to have a followup inspection within 30 days.

The County inspectors stated that the County had not developed written standard operating procedures for followup inspections at source control properties. They

explained that property data were entered into the system frequently and that comments in the GIS system were used to track inspections that had been conducted. County inspectors described how the color of the points in the GIS map demonstrated the status of an inspection and if followup was needed. A red point means the County has inspected the property and found a deficiency. A green point means the County has inspected the property and that no issues or deficiencies were observed. County inspectors stated that when a property was found to have stormwater issues and a followup inspection was needed, County inspectors would place comments in the GIS and the point would remain red. They explained that the County did not have a method within GIS to sort the data to view properties in need of followup inspections or to sort followup inspections that had been conducted, and that written procedures for tracking followup activities had not been developed.

The EPA Inspection Team visited a number of properties with the County inspectors that had been found to have previous source control deficiencies. The EPA Inspection Team learned during the property inspections that some of the properties visited had not received a followup inspection for five to eight months, which is well beyond the 30-day followup goal. The County did not have a method to adequately track properties needing followup inspections and County inspectors were not performing timely followup inspections. The lack of tracking and performing followup inspections is not consistent with the County's rationale for reducing the number of businesses inspected from 1,045 to 700, as quoted above.

County inspectors provided an example compliance letter dated September 26, 2012, that had been sent to a property owner in violation of the Water Pollution Control Ordinance which included a re-inspection date to assess compliance that was roughly 30 days after the date of the letter (see Appendix D, Exhibit 4). They explained that the compliance letter had been generated by the AMANDA system and that additional detail had been added by County inspectors. During the County's demonstration of the source control GIS map, the EPA Inspection Team noted that a followup inspection had not been conducted at the property in the example compliance letter.

The EPA Inspection Team additionally noted that a number of other points identified as needing inspection in the County's GIS system had not been re-inspected within the 30-day time period. For example, three properties visited during the June 21, 2012 source control site visits near the 21000 block of 87th Avenue Southeast in Woodinville, WA were flagged in need of followup inspection. However, the three properties had not been re-visited more than four months later. The County inspectors stated that these properties were due for followup inspections. They additionally explained that they try to inspect flagged facilities as time allows but had not visited these properties in the last few months.

Further, County staff explained that they had experienced several instances of denied entry and did not have a process to schedule return visits to properties where they were denied access. It was not apparent to the EPA Inspection Team how these properties were documented as needing followup inspections in the source control GIS map.

In summary, Snohomish County lacked a process to ensure that followup is conducted at properties when deficiencies are noted during initial inspections.

2.1.2. Snohomish County had not fully developed and implemented a progressive enforcement policy to require source control sites to come into compliance with stormwater requirements within a reasonable time period.

Section S5.C.7.iv of the Permit states that the County "shall implement a progressive enforcement policy to require sites to come into compliance with stormwater requirements within a reasonable time period." Section S5.C.7.iv of the Permit additionally states when it is determined that a property has failed to adequately implement BMPs after a followup inspection, the County shall "take further enforcement action as established through authority in its municipal code and ordinances, or through the judicial system."

Pursuant to this requirement, the EPA Inspection Team requested "documentation for progressive enforcement policy" and an "example/case file of source control incident where enforcement was used." County staff provided an example of enforcement that the County had taken on a construction site that occurred in 2008, but did not provide an example of enforcement pertaining to its source control program (i.e., industrial, commercial, or multi-family properties).

Page 21 of the County's 2012 SWMP Plan states that the "revised code requires the implementation of stormwater source control BMPs by anyone who is performing activities that might contribute pollutants to stormwater." Chapter 7.53.170-200 of the County's Water Pollution Control ordinance covers enforcement options for violation of the ordinance (see Appendix D, Exhibit 3); however, a specific escalation policy or procedure is not included. Additionally, Chapter 7.53.190 of the County's Water Pollution Control Ordinance states that the "director shall develop written policies governing the imposition or suspension of penalties under this section which shall be forwarded to the county council for approval by written motion." This information was not provided to the EPA Inspection Team during the inspection, and County staff stated that a progressive enforcement policy had not been developed, but that the expected time period for compliance with required source control BMPs was 30 days.

The County inspectors stated that the County wants to get businesses to voluntarily comply with source control requirements; however ongoing source control violations not resolved through SWM actions are referred to Code Enforcement, a division within PDS. The EPA Inspection Team did not interview representatives from Code Enforcement.

The EPA Inspection Team noted that the County had not regularly performed followup source control inspections (see Section 2.1.1 above) necessary to identify violations at properties and had therefore not fully developed and was not fully implementing a progressive enforcement policy where further enforcement actions could be taken, as needed, as a product of followup inspections.

Section 2.2 Operation and Maintenance Program

Section S5.C.9.a of the Permit requires the County's SWMP to include a program to conduct and regulate maintenance activities to prevent or reduce stormwater impacts. Pursuant to the Permit, Pages 25-29 of the County's 2012 SWMP Plan outline minimum performance measures to implement during operation and maintenance activities at County-owned properties, at roads and stormwater facilities, and at private stormwater facilities.

On October 23-24, 2012, the EPA Inspection Team conducted site visits at two properties owned and operated by Snohomish County. The primary purpose of the visits was to observe the County's process for developing and implementing stormwater pollution prevention plans (SWPPPs) at its properties. Summary observations pertaining to the facilities are presented below due to their direct relevance to the County's obligations under its MS4 permit.

2.2.1. Concerns pertaining to improper pollution prevention practices and SWPPP implementation were noted during site visits at County facilities.

Section S5.C.9.b.ix of the Permit requires the County to develop and implement a SWPPP for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the County in the area subject to the MS4 Permit that are not required to have coverage under the *General NPDES Permit for Stormwater Discharges Associated with Industrial Activities* or another NPDES permit that covers stormwater discharges associated with the activity.

The EPA Inspection Team visited the Cathcart Way Operations Center and the Arlington Operations Center, both of which are owned and operated by the County. SWPPPs had been developed for these two facilities, and should therefore be fully implemented. The SWPPPs were available for review during the site visits (see Appendix D, Exhibits 5 and 6).

Cathcart Way Operations Center – 8915 Cathcart Way, Snohomish, Washington

The Cathcart Way Operations Center is used by two County Public Works divisions, Road Maintenance and Fleet Maintenance, to maintain and operate the County's roadways and vehicles and equipment. The facility has various functions; however due to time constraints the EPA Inspection Team limited observations to the vacuum truck decant facility and materials storage yard during the inspection. The EPA Inspection Team reviewed the facility SWPPP and compared the SWPPP requirements to the site conditions.

The EPA Inspection Team observed the following with regard to pollution prevention and good housekeeping at the Cathcart Way Operations Center:

1. Sediment accumulation was observed adjacent to storm drain inlets in the central area of the materials storage yard (see Appendix E, Photographs 1 through 6). In

accordance with Section 6.2.1 of the SWPPP, good housekeeping practices require employees to "[s]weep up and dispose of dirt and litter from driveways and other paved outdoor surfaces, rather than hosing dirt into storm drains." In accordance with Section 6.2.1 of the SWPPP, "[c]ertain routine maintenance procedures are performed on a regular schedule such as parking lot sweeping and catch basin vactoring." While inlet protection BMPs had been installed in the storm drain inlets near the pipe storage area and the trash bin (see Appendix E, Photographs 3 through 6), good housekeeping and pollution prevention measures should be implemented in accordance with the SWPPP to prevent sediment from entering the storm sewer system.

2. A petroleum product was observed leaking from a County truck and onto the pavement throughout the materials storage yard (see Appendix E, Photographs 1, 2, 3, 5, and 6). Section 6.5.3 of the SWPPP states, "[a]ll road maintenance vehicles are inspected daily for fluid/other leaks." It should be noted that facility representatives determined that the source of the leak was a truck that was being operated in the area during the inspection. Facility representatives coordinated to have personnel clean up the spill while the EPA Inspection Team was onsite.
3. Material stockpiles including soil and mulch were stored outside without full coverage or containment BMPs (see Appendix E, Photograph 7). Although the EPA Inspection Team did not observe material transport leading from the stockpiles on the pavement directly adjacent to the storage areas, sediment accumulation was observed in other areas on site as shown in Photographs 1 through 6 of Appendix E. Appendix A of the SWPPP includes the full text of BMP 16 including a pollutant control approach and required BMPs for outside storage and transfer of solid raw materials, by-products, or finished products. The identified BMPs include placing a temporary cover over the materials and placing curbs or berms along the perimeter of the area to prevent run-on and runoff of materials and stormwater.

Arlington Operations Center – 19700 67th Avenue NE, Arlington, Washington

The Arlington Operations Center is used by the Road Maintenance and Fleet Maintenance divisions of the Public Works Department to maintain and operate the County's roads and fleet. The facility is primarily used for road maintenance material storage and heavy equipment maintenance, repair, and storage. The EPA Inspection Team reviewed the provided facility SWPPP dated March 2009, and made comparisons between the SWPPP requirements and site conditions.

The EPA Inspection Team observed the following with regard to pollution prevention and good housekeeping at the Arlington Operations Center:

1. The facility SWPPP map had not been updated to show current conditions, and County staff were unable to explain stormwater flow pathways. In accordance with page 9 of the facility SWPPP, "[o]n this site there are two major drainage sub-basins (1 and 2)," and sub-basin 2 "receives runoff from the Road Maintenance Facility from catch basins near the Road Maintenance Sand Shed,

and Fleet Management Facility." County staff provided the EPA Inspection Team with an updated map of the facility, but stated that some of the hazardous storage and catch basins were not correct on the map and needed to be updated. It was also noted that the map contained an incorrect facility title.

County staff could not provide a map of the stormwater flow pathway, and were unsure where specific catch basins drained. They explained that all stormwater drained to catch basin 1, but did not explain whether sub-basin 2 was still in use (as stated in the facility SWPPP).

Floor drains located inside the Maintenance Facility building were observed in the west side of the building, as well as outside of the east doors (see Appendix E, Photographs 8 through 10). County staff explained that they likely drain to catch basin 1. In accordance with page 14 of the facility SWPPP, "[a]ll maintenance activities occur within the covered garage," and "The trench drains were connected to the stormwater system and drained into the retention/detention infiltration pond, located south of the building." Page 14 of the SWPPP continues, "Do not connect maintenance and repair shop floor drains to storm drains."

2. Sediment accumulation was observed adjacent to the vehicle wash area located in the central area of the materials storage yard (see Appendix E, Photographs 11 through 13). The Arlington Facility site manager stated that road and fleet maintenance vehicles will sometimes pre-wash some of the larger debris from their vehicles before running them through the vehicle wash area. In accordance with page 10 of the facility SWPPP "truck wash water" and "vehicle maintenance and cleaning areas" are potential pollutant materials. In accordance with page 15 of the SWPPP, "Any dirty equipment entering the Arlington Site is first directed to the wash facility." In accordance with page 17 of the facility SWPPP, "Keep all wash water within the curbed area serviced by sanitary sewer." The EPA Inspection Team observed heavy sediment deposition at the pre-wash area, and wash water from the area appeared to flow to an earthen ditch connected to the infiltration pond (see Appendix E, Photographs 11 through 13).
3. A sand stockpile was stored outside of a covered shed without full coverage or containment BMPs (see Appendix E, Photograph 14). In accordance with page 15 of the facility SWPPP, "This facility is covered so that street sweeping materials stored within are not subject to erosion or run-on." Page 15 of the facility SWPPP also states in reference to sand storage "Ensure that materials are not tracked out of building, and swept up if so." In addition, County staff stated that some of the sand located in the shed was pre-mixed with salt additives, but the mixed sand was located under cover. However, it was not clear to the EPA Inspection Team which sand contained the salt additive.

2.2.2. Snohomish County lacked a method or process to facilitate better oversight of the individual County departments and divisions to ensure adequate compliance activities for the operation and maintenance program are performed.

Section S5.C.3 of the Permit states the "SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this Permit."

Page 29 of the County's 2012 SWMP Plan explains that multiple County departments are assigned as custodians of their own properties or facilities. The County's 2012 SWMP Plan also indicates that the individual departments are responsible for performing their own inspections and maintenance, including the development of SWPPPs.

The County Environmental Programs Compliance Specialist explained that pollution prevention and good housekeeping are the direct responsibility of the following seven departments and divisions that manage and operate the County properties:

- Department of Public Works, SWM Division.
- Department of Public Works, Road Maintenance Division.
- Department of Public Works, Solid Waste Division.
- Department of Public Works, Fleet Division.
- Department of Parks and Recreation.
- Snohomish County Airport.
- Department of Facilities Management.

The County Environmental Programs Compliance Specialist stated that the development of a SWPPP for each of the County properties was the responsibility of the individual department or division that operated the property, and that the County has 14 properties with SWPPPs. The County Environmental Programs Compliance Specialist explained that at properties not required to have a SWPPP where pollutant generating activities might occur, a property management plan had been developed by the individual department or division that operates the properties.

The County Environmental Programs Compliance Specialist explained that SWM organizes the coordination meetings and compiles the annual report submitted to Ecology, but that SWM is only responsible for its own County properties or compliance activities. He additionally stated that SWM does not have authority over the other departments and divisions, and other than annual reporting requirements, SWM is not aware of the activities conducted and procedures in place in the other departments and divisions.

In addition, the County does not currently staff a full-time Stormwater Management Program Administrator/Coordinator, or someone who is specifically tasked with coordination and oversight among the County's individual departments and divisions to implement the various components of its stormwater management programs including ensuring implementation of the operation and maintenance program.

2.2.3. Snohomish County lacked coordination mechanisms among departments to eliminate barriers to compliance with the operation and maintenance terms listed in the Permit.

Section S5.C.3 of the Permit states that the "SWMP shall include coordination mechanisms among departments within each jurisdiction to eliminate barriers to compliance with the terms of this Permit."

The County's 2012 SWMP Plan states that on February 4, 2008 "The Snohomish County Executive issued Executive Order 2008-49 requiring department directors or their designees to attend twice-annual meetings at which NPDES issues will be discussed. These meetings are typically held in April and October."

Staff from multiple County departments explained that the twice annual meetings were an effective way for the County to coordinate compliance activities and indicated that they felt they received benefit from this coordination effort. County staff provided coordination meeting agendas from 2011 and 2012 to the EPA Inspection Team (see Appendix D, Exhibit 8).

County staff from each of the departments and divisions provided tracking information for various properties' operations and maintenance activities. County staff explained that each department and division developed its own protocol and performed compliance activities independent from the other divisions. During the inspection, representatives from each County department and division discussed the unique and individualized methods for entering and tracking inspections and conducting training and maintenance activities. The County Environmental Programs Compliance Specialist provided documents for these activities from each division after the inspection.

The EPA Inspection Team noted that many of the databases and record keeping methods used by the County departments and divisions looked similar, but had been created independently. For example, quarterly monitoring forms for the County's solid waste sites and the County's airport varied substantially (see Appendix D, Exhibit 7). Another example is the Catch Basin Inspection database/application, which is not based on AMANDA and does include real time tracking of the status of catch basin inspections. Other department and division representatives were not aware of this tool developed by and for planning and tracking catch basin inspections only. The EPA Inspection Team also noted that varying degrees of sophistication were demonstrated in the tracking methods used by the County departments and divisions.

Based on the review of tracking databases and training and inspection documentation provided by the County, the EPA Inspection Team determined that many departments and/or divisions were duplicating efforts, some programs would benefit from the tools used by other programs, and that there was a lack of coordination among the departments to share procedures and produce consistent information for tracking and annual reporting.

2.2.4. Snohomish County had not fully implemented an ongoing training program for employees who have operation and maintenance job functions that could impact stormwater quality.

Section S5.C.9.b.viii of the Permit states that the County must "implement an ongoing training program for employees of the permittee who have primary construction, operation and maintenance job functions that could impact stormwater quality." Pursuant to this requirement, the EPA Inspection Team requested "O and M employee training plan/program, records, and syllabus pertaining to pollution prevention/good housekeeping." Staff from the County's individual departments and divisions provided the EPA Inspection Team with training rosters and training materials, but the County did not maintain a comprehensive list of departments, divisions, and/or employees that had received training.

During discussions with the County's catch basin cleaning crew, crew members stated that they had not received training about the Permit or about what can and cannot go into the storm drain system. The County Crew Chief stated that he would inform his superiors if an illicit substance was identified during catch basin cleaning operations.

In summary, the County must implement ongoing training to County operations and maintenance staff who have job functions that could impact stormwater quality. Additionally, the County could improve its training by developing a more structured program for operations and maintenance training activities and associated tracking. Specifically, the program should include established schedules and frequencies for training activities, continued identification of staff or positions that require training, procedures for documenting and tracking training activities, and effectiveness measures for assessing the implementation of the training program.

2.2.5. Snohomish County had not fully developed and implemented an enforcement strategy to respond to issues of non-compliance in the maintenance of permanent stormwater treatment and flow control facilities regulated by the County.

Section S5.C.9.b.ii of the Permit states that the County must "implement ordinances or other enforceable documents requiring maintenance of all permanent stormwater treatment and flow control facilities regulated by the Permittee (including catch basins), in accordance with the maintenance standards established under S5.C.9.b.i." Pursuant to this requirement, the EPA Inspection Team requested a progressive enforcement policy requiring permanent stormwater treatment and flow control facilities to come into compliance, but the County did not provide this information.

County staff explained that enforcement actions are only available to Code Enforcement, which is under the PDS Department, and that County inspectors do not have authority to take corrective actions beyond a correction letter (see Appendix D, Exhibit 9). It was explained that correction letters were sent to facility owners upon identifying maintenance needs during facility inspections. County staff stated that the County had not developed a timeline for followup and referral to Code Enforcement in cases of non-compliance; however, the correction letters set a one year compliance date. County stormwater facilities inspectors additionally stated that followup inspections were rarely needed, but that an additional letter had been created to deal with non-compliance after the one-year deadline. During the inspection, a site visit was conducted at a private

property that County staff stated had been a "problem" site with respect to the onsite permanent stormwater treatment and flow control facility. They explained that the County had almost taken legal action to require the homeowner to replace a bioswale that had been removed in construction of a residence. Observations from the site visit to this permanent stormwater treatment and flow control facility are provided below in Section 2.2.6 of this report.

In summary, the County did not have a documented procedure to enforce required maintenance of all permanent stormwater treatment and flow control facilities regulated by the County to ensure that maintenance is performed within the timeframes dictated in Section S5.C.9.b.i.2 of the Permit.

2.2.6. Observations pertaining to operation and maintenance of permanent stormwater treatment and flow control facilities during site visits at stormwater facilities regulated by the County.

Section S5.C.9.b.ix of the Permit requires the County to implement an ongoing inspection schedule to annually inspect all stormwater treatment and flow control facilities.

Water quality treatment facility – 150th Street off of Old Owen Road, Monroe, Washington

The EPA Inspection Team conducted a site visit to a water quality treatment facility located on 150th Street off of Old Owen Road (see Appendix E, Photographs 15 through 23). County inspectors explained that this site had been a problem for the County and that the County had almost taken legal enforcement on the property owner. They explained that a bioswale had originally been constructed in 1997 on the last undeveloped tract of the subdivision, and that when the tract was developed in 2005, the property owners removed the bioswale. County inspectors explained that they had discovered this through the first round of inspections required by the previous permit conducted in 2009, and that they had explained to the property owner that the bioswale had to be replaced. They stated that the property owner had initially refused to comply and had engaged legal counsel in the process. Eventually the County convinced the property owner to implement the bioswale, and agreed to act on the homeowner's request that the County send a letter stating that all of the homeowners in the development were responsible for maintenance of the facility. County inspectors explained that the County had performed maintenance on the two remaining bioswales as part of the County's one-time maintenance initiative.

The EPA Inspection Team observed the following with regard to operation and maintenance of the water quality treatment facility:

1. The property owners restored the bioswale at its designed and specified location (see Appendix E, Photographs 15 and 16).
2. Drainage from the development flowed through the restored bioswale and from an underground drainage vault to an upper tier stormwater facility that County inspectors referred to as a bioswale located southeast of the restored bioswale (see

Appendix E, Photograph 17). County inspectors stated that one foot of amended soil had been added to the bioswale as a part of the maintenance work completed.

3. Stormwater flowing from the upper tier bioswale drained to the lower tier bioswale. County inspectors stated that the pipe leading from the upper to the lower tier bioswale had been checked for functionality during the maintenance work completed on the bioswales by the County. The lower tier bioswale contained an outlet that County inspectors stated drained down the hill and into the County MS4 (see Appendix E, Photographs 18 and 19).

Water quality treatment facility – 121st Street, Monroe, Washington

The EPA Inspection Team conducted a site visit to a water quality treatment facility located on 121st Street. County inspectors explained that the County had taken over responsibility of this facility because the County had a drainage easement and had not obtained a covenant with the adjacent homeowners. Therefore, the County volunteered to take over maintenance responsibilities. The County inspectors stated that they would generate a work order to the Road Maintenance Division for maintenance issues identified at the facility. He further explained that once the maintenance was completed a County inspector would conduct an additional site visit to the facility to ensure that the maintenance had been performed correctly.

The EPA Inspection Team observed the following with regard to operation and maintenance of the water quality treatment facility:

1. The facility consisted of a stormwater pond that had a permanent pool (see Appendix E, Photograph 20). Overflow from the pond flowed through a stormwater facility that County inspectors referred to as a bioswale. The County inspectors stated that the bioswale had been improved with one foot of amended soil (see Appendix E, Photograph 21).
2. Trash, including half of a 55-gallon drum, was partially blocking the bioswale outlet (see Appendix E, Photograph 22). In addition, areas of the bioswale needed revegetation to prevent erosion (see Appendix E, Photograph 23).